

**REMARKS**

Reconsideration and allowance of the Claims of the present invention is respectfully requested.

The following conclusions are set forth in the Advisory Action:

- (a) U.S. patent No. 4,886,578 (Hendren et al) does not teach the use of MPD-I fibrils as binder.
- (b) the amendment dated February 2, 2004 reciting "a resin impregnatable structure" changes the scope of the claims and does not separate from the structure taught by the cited prior art.
- (c) the range of binder taught by U.S. patent No. 3,756,908 (Gross et al) reads on the up to about 20% weight percent of binder recited in the amendment dated February 2, 2004.

In reply to conclusion (a), it is respectfully submitted that the fibrils disclosed in the present invention are binder. It was well known to those of ordinary skill in the art at the time the invention was made that fibrils, including MPD-I fibrils, function as binders in nonwoven fibrous paper-like structures.

See, for instance, U.S. patent 4,698,267 (issued to Tokarsky; assigned to DuPont) which granted October 6, 1987, more than 1 year before the filing date of U.S. patent No. 4,886,578 (Hendren et al). Col 3, lines 37-41, of U.S. patent 4,698,267 states, "Use of binders such as fibrils [emphasis added] or binder resins greatly facilitates the handling of the para-aramid papers during preparation of the papers and are essential when the papers are to be continuously impregnated with resin for the preparation of laminates." See also International patent application WO 01/07713 which published February 1, 2001 after the grant of U.S. patent No. 4,886,578 (Hendren et al), but before the filing date of the present invention. Page 6, lines 17-19 and 27-32, of WO 01/07713 confirms the continued use of fibrils as binder and states, "It is preferable to use meta-aromatic polyamide fibrils as the binder in the present invention from the viewpoint of heat resistance and dimensional

stability. ... Moreover, it is also possible to add organic resin, especially thermosetting resin, such as epoxy resins, phenol resins, and melamine resins, as the binder component in addition to the meta aromatic polyamide fibrils as long as the purpose of the present invention is not affected by this resin."

As such, in July 2001 when the present application was filed, anyone skilled in the art knew from reading U.S. patent No. 4,886,578 (Hendren et al) that the primary function of the fibrils used therein is that they assist in binding the floc together into a cohesive paper like web or layer in the process for making the board disclosed in U.S. patent No. 4,886,578 (Hendren et al). This binding function by definition makes this ingredient a binder.

In reply to conclusion (b), there is no basis to assert "a resin impregnatable structure", as recited in the present invention, is taught by the cited prior art. It is respectfully submitted that U.S. patent No. 4,886,578 (Hendren et al) discloses an oil impregnatable board, but does not disclose or suggest "a resin impregnatable structure". Example 4 of the present invention shows that at the levels of binder (i.e., at least 35 weight percent) disclosed in U.S. patent No. 4,886,578 (Hendren et al), each layer making up its board is not resin impregnatable.

U.S. patent No. 3,756,908 (Gross et al) was only cited by the examiner and relied upon as showing a fibrous material containing a binder. U.S. patent No. 3,756,908 (Gross et al) is entirely silent on whether any of its materials are resin impregnatable and the conditions that would make it resin impregnatable. The examiner has not provided any reasoning why U.S. patent No. 3,756,908 (Gross et al) would motivate anyone skilled in the art to modify the material disclosed in U.S. patent No. 4,886,578 (Hendren et al) to make it resin impregnatable. In fact, U.S. patent No. 3,756,908 (Gross et al) would not motivate anyone to modify the structure disclosed by in U.S. patent No. 4,886,578 (Hendren et al) for any purpose, because U.S. patent No. 4,886,578 (Hendren et al) was filed after the publication of U.S. patent No. 3,756,908 (Gross et al) and is, in fact, cited in Col. 2, line 59, of U.S. patent No. 4,886,578 (Hendren et al) and despite this evidence of conscious

awareness and use of teachings from U.S. patent No. 3,756,908 (Gross et al), the inventors of U.S. patent No. 4,886,578 (Hendren et al) clearly chose to state it was better to make their material and not to modify their material to be more like that disclosed in U.S. patent No. 3,756,908 (Gross et al).

In reply to conclusion (c), it was and is not obvious to modify the amount of binder in the material disclosed in U.S. patent No. 4,886,578 (Hendren et al) to use less binder in order to be in the range of binder used in the substantially different material disclosed in U.S. patent No. 3,756,908 (Gross et al). This is picking and choosing only so much from U.S. patent No. 3,756,908 (Gross et al) as will support the rejection while excluding other parts necessary for the full appreciation of what U.S. patent No. 3,756,908 (Gross et al) fairly suggests to one of ordinary skill in the art. U.S. patent No. 3,756,908 (Gross et al) discloses an amount of binder useful for synthetic paper structures made solely of aromatic polyamide. In contrast, the paper structure of the present invention is not made solely of aromatic polyamide, but includes a fluoropolymer floc that behaves quite differently than any of the ingredients in the Gross et al material. However, the examiner has ignored this teaching that the binding amount is useful in materials made solely of aromatic polyamide from U.S. patent No. 3,756,908 (Gross et al) in concluding that U.S. patent No. 3,756,908 (Gross et al) would motivate one to change the amount of binder in the material disclosed in Hendren et al that is not made entirely of aromatic polyamide. This is illogical and contrary to law.

The law is that there must be positive evidence, a teaching, or at least a suggestion in one or more reference that combining the references in the manner suggested by the examiner would be a desirable thing to do. To support combining references to reject claims under 35 U.S.C. 103, it is not realistic to pick and choose from any one reference, to the exclusion of other parts necessary to full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The mere existence in the prior art of individual features of the invention does not without more, make the invention obvious under 35 U.S.C. 103. See Racal-Vadic, Inc. v Universal Data Systems, 207 U.S.P.Q. 902.

**Conclusion**

The foregoing reasons are believed to comprise a full and complete response to the outstanding non-final Examiner's Office Action. Further, it is submitted that any basis for the rejections of the Claims has been obviated. Thus, Claims 1-15 are respectfully submitted to be in condition for allowance. Favorable reconsideration with subsequent allowance of Claims 1-15 is respectfully requested. If any matter remains to be resolved before allowance, the Examiner is encouraged to call Applicants' attorney at the number provided below.

Respectfully submitted,



JOHN E. GRIFFITHS  
ATTORNEY FOR APPLICANTS  
REGISTRATION NO. 32,647  
TELEPHONE: (302) 892-7909  
FACSIMILE: (302) 892-7343

Dated: March 2, 2004